## **ABSTRACT**

This invention relates to a novel process of manufacture of nanoparticles of substantially water insoluble materials from emulsions. The emulsions have the ability to form a single liquid phase upon dilution of the external phase, instantly producing dispersible solid nanoparticles. The formed nanoparticles have average diameter of about 10 to 200 nm and are suitable for drug delivery and targeting of water insoluble therapeutic or diagnostic agents. Examples of such agents are methotrexate, progesterone, testosterone, prednisolone, and ibuprofen. Such agents can be used in a wide range of therapeutic and diagnostic treatments including treatment for cancer, hormonal therapy, and pain management.